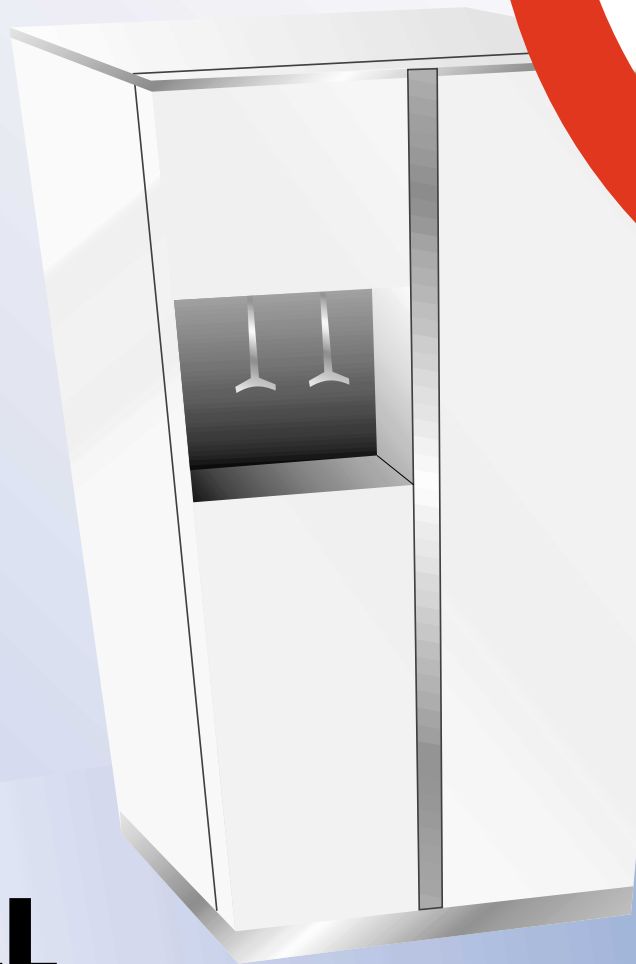
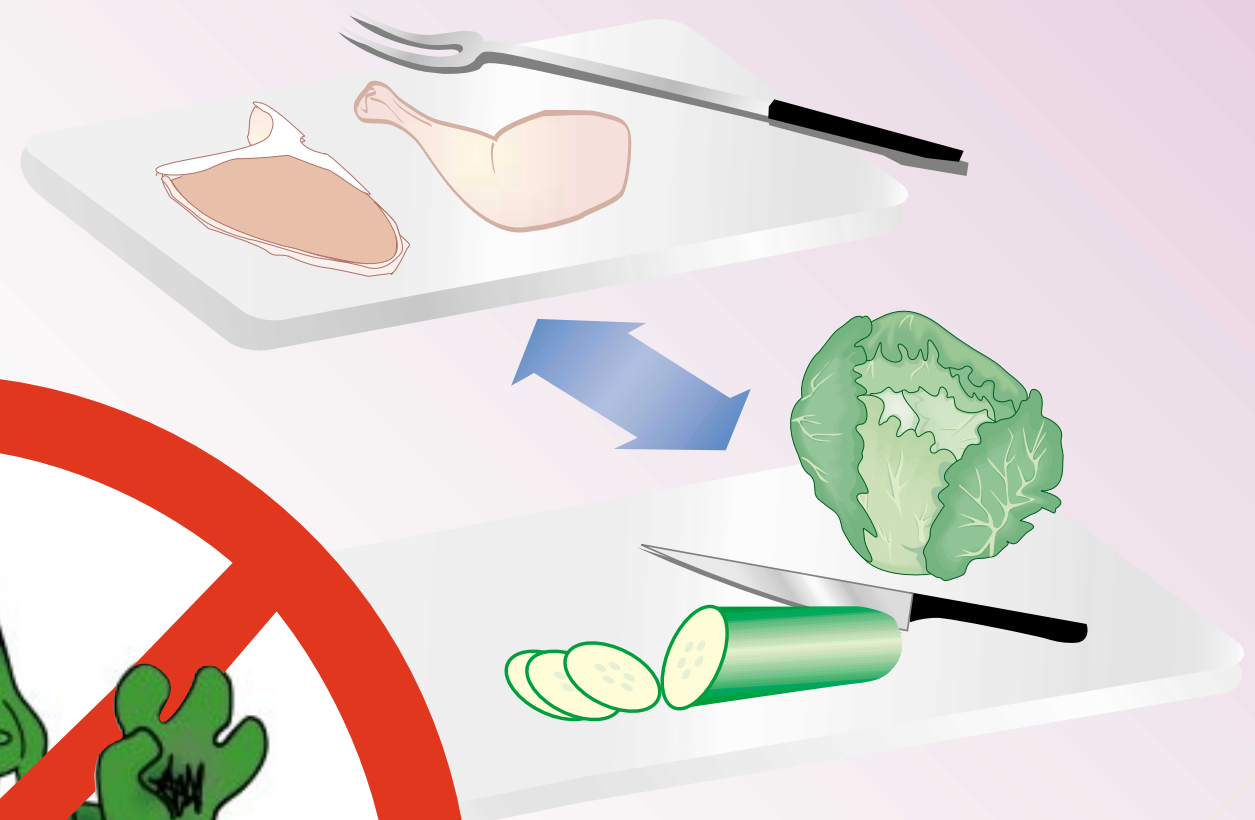


# Schools **FIGHT BAC!**



**CLEAN**  
Wash hands  
and surfaces  
often.

**SEPARATE**  
Don't cross-  
contaminate.



**CHILL**  
Refrigerate  
promptly.



**COOK**  
Cook to proper  
temperatures.



## Keep Food Safe From Bacteria™

For More Food Safety Information, Visit our Website:  
<http://schoolmeals.nal.usda.gov>



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# In the Cafeteria

## CLEAN

- Wash hands after using the bathroom, preparing food, handling raw meat, taking out the trash, and picking anything up off the floor.
- Wash utensils and surfaces in hot, soapy water before and after food preparation.
- Using a sanitizer or a mixture of bleach and water on surfaces can provide some added protection against bacteria.
- Cutting boards should be run through the dishwasher or washed in hot, soapy water after each use.

## SEPARATE

- Use one cutting board for fresh fruits and vegetables.
- Use a separate cutting board for raw meat, poultry, and seafood.
- To prevent juices from raw meat, poultry, or seafood from dripping onto other foods in the refrigerator, place these raw foods in sealed containers or plastic bags. Place on trays on the lowest shelf in the refrigerator.
- Never place cooked food on the same plate or cutting board that previously held raw food.

## CHILL

- Refrigerate or freeze perishables, prepared foods, and leftovers within 4 hours or less. Marinate food in the refrigerator.
- Never defrost food at room temperature. Thaw food in the refrigerator, in cold water, or in the microwave.
- Separate leftovers into shallow containers for quicker cooling in the refrigerator.
- Don't over-stuff the refrigerator. Cold air must circulate to keep food safe.

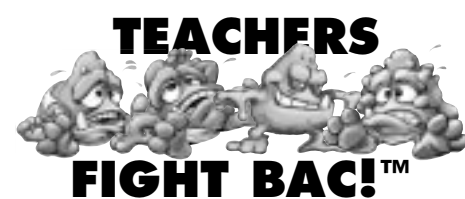
## COOK

**Thermy™** "IT'S SAFE TO BITE WHEN THE TEMPERATURE IS RIGHT!"

- Keep hot foods at 140 °F or higher.
- Bring sauces, soups, and gravies to a rolling boil when reheating.
- Use a clean food thermometer to make sure meat, poultry, egg dishes, casseroles, and other foods are cooked to the safe internal temperature.

Adapted From:  
The Partnership for Food Safety Education  
[www.fightbac.org](http://www.fightbac.org)

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# Across the Curriculum

<b>Language Arts Art</b>	<b>BAC!’s Story — In His Own Words!</b> <ul style="list-style-type: none"><li>Invite children to write a short adventure story from the point of view of the bacteria — featuring their efforts to stay alive and multiply! Encourage them to include several food safety mistakes that help bacteria multiply and several good food safety habits that keep bacteria from multiplying!</li><li>Have students illustrate their stories with their own portrait of BAC!</li></ul>
<b>Language Arts Music</b>	<b>Fight BAC!™ Rap</b> <ul style="list-style-type: none"><li>Have children (as a group) compose a rap song or chant using the basic messages of food safety. Start by having students list all the vocabulary words they can think of for each key “Action,” along with words that rhyme. Remind them to create one verse for each key “Action.”</li><li>When the rap is done, have children perform it with percussion or rhythm instruments.</li></ul>
<b>Language Arts Science</b>	<b>Good Guys/Bad Guys</b> <ul style="list-style-type: none"><li>Not all bacteria are bad! Have students research good bacteria and bring in three kinds of food — or pictures of food — that have good bacteria (like yogurt or cheddar cheese).</li><li>Ask children to research the purpose of good bacteria in food. Encourage them to use a variety of sources: Internet, library, the school nurse, etc.</li></ul>
<b>Language Arts Science Art</b>	<b>Bacteria — From the Artist’s View!</b> <ul style="list-style-type: none"><li>Under a microscope, bacteria can look like a colorful work of art! Have students find pictures of magnified bacteria cells in the encyclopedia or through other research.</li><li>Have students draw their own pictures of bacteria as if they were seeing them through a microscope, using colored pencils and other materials to give texture to the artwork. Remind them to label their pictures with the scientific name! (What does <i>Salmonella</i> really look like?)</li><li>Remind the students to check the <a href="http://www.fightbac.org">www.fightbac.org</a> web site to find other bacteria names.</li></ul>
<b>Math Science</b>	<b>Lunch Box Test Pilots!</b> <ul style="list-style-type: none"><li>Pack two lunches in the morning with some cold food items (like pasta salad, a cheese sandwich, or yogurt). Use a cold pack in one lunch bag.</li><li>Have students test each food’s temperatures at 1-hour intervals to see if any of the foods are in the “danger zone” 41 °F – 140 °F.</li><li>Make a bar chart of the food’s temperatures to show the difference between the two lunches, plotting out the temperatures taken at each interval.</li><li>Invite children to explain the significance of this information!</li></ul>
<b>Math</b>	<b>Multiplying Bacteria</b> <ul style="list-style-type: none"><li>Have students imagine a fictional bacteria that will reproduce once every 30 minutes at room temperature (70 °F/21 °C), once every 10 hours when cooled in the refrigerator at 41 °F/4 °C, and once every 7 hours when heated in the oven at 120 °F/49 °C.</li><li>Now, challenge them to figure out and chart: How many bacteria would be present in each location after 1 hour . . . 2 hours . . . 6 hours . . . 1 day.</li><li>Through this exercise, what can they hypothesize about how temperature affects bacterial growth?</li></ul>
<b>Social Studies Creative Dramatics</b>	<b>Food Safety’s Cast of Characters</b> <ul style="list-style-type: none"><li>Many people are responsible for helping to keep food safe. Conduct research about the people involved from farm to table like farmers, grocers, cooks, government inspectors, and others.</li><li>Role-play these characters in class using props students bring in or make.</li></ul>
<b>Social Studies</b>	<b>Food Safety Long Ago . . . and Far Away</b> <ul style="list-style-type: none"><li>Ask your school librarian to help students research food safety practices from long ago — such as the use of drying and salting for a long sea-voyage . . . first use of thermometers in determining safe food temperatures . . . the invention of pasteurization . . . irradiation.</li><li>Encourage students to talk to parents and grandparents about how food was stored when they were growing up and contrast it with how food is stored today.</li><li>In current times, how might people in different parts of the world deal with food safety? Have students brainstorm how the availability of soap . . . water . . . and refrigeration would make a difference. What about places impacted by weather disasters like earthquakes or hurricanes?</li><li>What strategies can they come up with for these affected areas?</li></ul>

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# In the Home

Use this survey to check out your food safety practices.

## CLEAN

**DID YOU . . .**

- Wash hands with warm water and soap for 20 seconds before preparing food?
- Wash hands with warm water and soap for 20 seconds before eating?
- Clean countertops before preparing food?
- Rinse fruits and vegetables with cold running water before preparing them?
- Rinse fruits and vegetables with cold running water before eating them?

	A	B	C	D
ME				
1.				
2.				
3.				
4.				
5.				
TOTAL	Y N	Y N	Y N	Y N

**Family Handwashing Scoreboards:**

Date:	Name:	When washed:

## SEPARATE

**DID YOU . . .**

- Clean the cutting boards used for raw meat, fish, and poultry before using for any other foods?
- Keep raw meat, fish, and poultry wrapped properly in the refrigerator so juices do not drip on other foods?
- Put cooked meat, fish, or poultry on a different platter than the one with the raw juices?

	A	B	C	D
ME				
6.				
7.				
8.				
TOTAL	Y N	Y N	Y N	Y N

**Cutting Board Critique**

Number of cutting boards:

Type (plastic, wood, etc.):

## COOK

**DID YOU . . .**

- Rotate food in the microwave to avoid “cold spots?”
- Bring sauces, soups, and gravy to a boil when reheating?
- Make sure eggs were cooked properly?
- Not eat cookie dough or cake batter that was made with raw eggs?

	A	B	C	D
ME				
9.				
10.				
11.				
12.				
TOTAL	Y N	Y N	Y N	Y N

**Safe Temperature Summary**

Kind of Meat: \_\_\_\_\_ Date Cooked: \_\_\_\_\_ Food thermometer temp: \_\_\_\_\_

Kind of Poultry: \_\_\_\_\_ Date Cooked: \_\_\_\_\_ Food thermometer temp: \_\_\_\_\_

Kind of Fish: \_\_\_\_\_ Date Cooked: \_\_\_\_\_ Food thermometer temp: \_\_\_\_\_

## CHILL

**DID YOU . . .**

- Use a cold pack for packed lunches or picnic foods?
- Refrigerate leftovers right away?
- Defrost foods in:
  - the refrigerator or
  - cold water or
  - the microwave?

	A	B	C	D
ME				
13.				
14.				
15.				
TOTAL	Y N	Y N	Y N	Y N

**FRIDGE EXAM**

The refrigerator is set at \_\_\_\_\_ degrees.

Food storage containers found:

\_\_\_\_\_ tall containers

\_\_\_\_\_ shallow containers

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